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DEPARTMENT OF NATURAL RESOURCES
DIVISION OF OIL, GAS AND MINING

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Salt Lake City, Utah 84180-1203
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April 23, 1991

TO: Minerals File

FROM: Holland Shepherd, Senior Reclamation Specialist *HS*

RE: Site Inspection, Body Tody Mill and Mine, S/015/040, Emery County, Utah

Date of Inspection: April 23, 1991, 1991

Time of Inspection: 9:00 - 11:00 a.m.

Conditions: Sunny, cool

Participants: David Taylor, Operator, Body Tody mine, Holland Shepherd,
DOGM

I conducted a site visit of the Body Tody mill and mine after receiving a phone call from Mr. David Taylor stating that he was planning to expand the site in the very near future. Apparently he has another company that is interested in his product and wants to come in and help financially to increase the size of the operation, and increase the production. The operation is now at approximately 3.5 acres. The expansion will take the operation above 6 acres in the immediate future and perhaps up to 25 acres in the long range.

I first met with Mr. Taylor at the mill site, which is located in the town of Emery itself, some 6 miles from the actual mine site. Mr. Taylor and I discussed the chemical analysis of the product that he was mining and marketing. I picked up a couple of copies of the lab analysis of the material he mines (please see attached). I informed Mr. Taylor that there was some question about the designation of the material in terms of being defined as coal, shale or clay. I also was given some samples of the material, by Mr. Taylor, before leaving the mill site. The samples do bear a much more common resemblance to shale or clay than they do coal. Mr. Taylor had some samples of coal at the site, taken from a mine called the Cowboy mine, which is an old coal mine located very close to the Body Tody mine site. The coal samples, compared to the material coming out of the Body Tody mine, are distinctly different.

I went on a brief tour of the mill site with Mr. Taylor before leaving. The mill consists predominantly of a process building, wherein the run-of-mine material is leached with water and ammonia to extract its humic acid content. Outside, the operator has stacked some ore piles and some waste material. The stockpiled material

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looks much like a good topsoil. It is actually used, according to the operator, for benefiting areas that have an agricultural use or are to be reclaimed. The material stacked outside in the yard looks a lot like a sort of petrified peat. The mill site area itself, probably disturbs less than an acre and a half of ground.

After reviewing the mill site, we traveled the 6 miles to the Body Tody mine where the operation is currently active. At the mine site we looked at the areas that are proposed for future disturbance, based on the operators intended plans to expand the operation. The operator plans to construct a mobile or temporary belt-line, some 1/4 mile long from the staging area of the current mine site to the edge of a steep cliff that drops down to Miller Canyon. The conveyor will connect with an area that will be used for a truck turn around and an ore stockpile. This area is directly adjacent to the newly paved Miller Canyon Road. The area will disturb approximately 2 acres of ground. The other proposed disturbance at the site will consist of an area to the southeast of the present mine portal and staging area. At this time, the operator has not decided whether this area will be an underground mine or a surface mine. The cover over the ore body ranges some 3-5 feet in depth. Mr. Taylor indicated to me that if this area is mined, the potential disturbance could be as large as 25 acres. He has contracted to mine some 360,000 cubic yards of material.

During my discussions with Mr. Taylor, I explained to him about the specificity of the large mine operations plan and the map scales which the Division would want to see incorporated into the plan. I explained that a bond would be required and that much more detailed plans than presently exist for the Body Tody site would be required by the Division before approval could be made for the operation. I also explained to him that it would take some time for the Division to review such a plan, so he needed to incorporate this into his future plans for the mine. In other words, he needed to take into consideration the timeframe involved. Mr. Taylor indicated to me that he was unfamiliar with developing a mine reclamation plan and would need some assistance in doing so. He wanted to know if the Division could help him out in completing or developing the plan. I explained to Mr. Taylor that we would be able to help him in developing the plans.

jb

Attachments

cc: Wayne Hedberg
David Taylor, Body Tody

S015040.1

Body Tody Inspection
4/23/91

Analyses of Material*

Proximate Analysis

| | |
|------------|--------|
| Moisture | 18.50% |
| Ash | 46.46% |
| Volatiles | 12.35% |
| Fix Carbon | 22.69% |
| Btu/lb | 3,168 |
| Sulfur | 1.56% |

Ultimate Analysis

| | |
|----------|--------|
| Moisture | 18.50% |
| Ash | 46.46% |
| Carbon | 21.11% |
| Hydrogen | 1.32% |
| Nitrogen | .55% |
| Sulfur | 1.56% |
| Oxygen | 10.50% |

* Copied from operator's records

Live Earth

Fertilizers

ANALYSIS

Hume Shale Ore

| | |
|-------------------------------|---------|
| N | 2.0% |
| P ₂ O ₅ | 1.0% |
| K ₂ O | .5% |
| Calcium | 1.85% |
| Iron | 6.0% |
| Magnesium | .29% |
| Copper | .002% |
| Manganese | .01 < % |
| Zinc | .018% |
| Boron | .002% |
| Cobalt | .001% |
| Molybdenum | .003% |
| Sodium | .09% |
| Aluminium | .87% |
| Arsenic | .003% |
| Cadium | .04% |
| Chromium | .01% |
| Selenium | .007% |
| Tin | .001% |
| Nickel | .004% |
| Cu | |

Testing conducted by
American Enviromental
565 So. Birch Dr.
Spanish Fork, Utah 84660
(801)266-7111

Miracle Rock Mining & Research
Box 28 • Ferron, Utah 84523
(801)384-2781



*WAL soluble minerals which are extracted from
62 lbs of material*

WAL, Inc.

6385 W. 52nd Ave., #5 (303) 420-7700 Arvada, CO 80002

TO: MR. ELMER HEINRICH
THE ROCKLAND CORP.
TULSA, OK 74128

DATE: MAY 11, 1987
WAL NO.: 87132-2
ANALYST: C. WILSON

P.O.: 26905

SAMPLE ID: BODY TODDY 4/87

SPARK SOURCE
MASS SPECTROGRAPHIC ANALYSIS
CONCENTRATION IN PPM WEIGHT

| ELEMENT | CONC. | ELEMENT | CONC. | ELEMENT | CONC. | ELEMENT | CONC. |
|------------|-------|-----------------------------|-------|------------|-------|------------|-------|
| Uranium | | Terbium | 0.1 | Ruthenium | | Vanadium | 0.1 |
| Thorium | | Gadolinium | 0.3 | Molybdenum | 0.04 | Titanium | 1 |
| Bismuth | | Europium | 0.1 | Niobium | 0.02 | Scandium | 0.1 |
| Lead | 0.2 | Samarium | 0.8 | Zirconium | 0.2 | Calcium | MC |
| Thallium | | Neodymium | 0.8 | Yttrium | 4 | Potassium | MC |
| Mercury | NR | Praseodymium | 0.4 | Strontium | 14 | Chlorine | 8 |
| Gold | | Cerium | 4 | Rubidium | 0.8 | Sulfur | MC |
| Platinum | | Lanthanum | 2 | Bromine | 0.2 | Phosphorus | 12 |
| Iridium | | Barium | 0.3 | Selenium | 0.9 | Silicon | MC |
| Osmium | | Cesium | 0.1 | Arsenic | 0.04 | Aluminum | MC |
| Rhenium | | Iodine | 0.1 | Germanium | | Magnesium | MC |
| Tungsten | | Tellurium | | Gallium | 0.1 | Sodium | MC |
| Tantalum | 0.6 | Antimony | | Zinc | 47 | Fluorine | 84 |
| Hafnium | | Tin | 0.03 | Copper | 2 | Oxygen | NR |
| Lutetium | 0.05 | Indium | STD | Nickel | 30 | Nitrogen | NR |
| Ytterbium | 0.2 | Cadmium | 0.1 | Cobalt | 9 | Carbon | NR |
| Thulium | 0.02 | Silver | 0.02 | Iron | 43 | Boron | 0.2 |
| Erbium | 0.1 | Palladium | | Manganese | 36 | Beryllium | 0.1 |
| Holmium | 0.1 | Rhodium | | Chromium | 0.4 | Lithium | 10 |
| Dysprosium | 0.5 | DISOLVED SOLIDS 19.0 g/pint | | | | Hydrogen | NR |

ALL ELEMENTS NOT DETECTED LESS THAN 0.01
INT-INTERFERENCE STD- INTERNAL STANDARD